

REMARKS

In this Amendment, Applicant has canceled claim 4, without prejudice or disclaimer of the subject matter thereof, has amended claims 1, 12, and 25 in order to more appropriately define the present invention. Further, Applicant has added new claims 26-37 to protect additional aspects of the invention. In making each of these amendments, Applicant submits that no new matter is introduced. As a result of this Amendment, claims 1-3 and 5-37 remain pending, with claims 13, 14, and 16-24 being withdrawn from consideration as directed to an non-elected invention.

In the Final Office Action, the Examiner rejected claims 1-3, 6-9, 11, 12, 15, and 25 under 35 U.S.C. § 102(b) as being anticipated by Lincklaen-Arriens et al. (U.S. Patent No. 4,090,170); rejected claims 1, 12, and 25 under 35 U.S.C. § 102(b) as being anticipated by RU-C1-2006953; rejected claim 10 under 35 U.S.C. § 103(a) as being unpatentable over Lincklaen-Arriens et al. in view of Brown et al. (U.S. Patent No. 5,627,414); and objected to claims 4 and 5 as being dependent on a rejected base claim, but indicated their allowability if rewritten in independent form including all the limitations of the base claim and intervening claims. Applicant appreciates the indication of allowable subject matter in the present application.

Objection to the claims

On page 7 of the Office Action, the Examiner objected to claims 4 and 5 as being dependent on a rejected base claim, but indicated their allowability if rewritten in independent form including all the limitations of the base claim and intervening claims. Applicant has canceled claim 4, without prejudice or disclaimer of the subject matter thereof, and the objection thereof is now moot. Further, Applicant has amended present

independent claim 1 to include the elements of claim 4. As a result, claim 5, which depends from claim 1, is in condition for allowance.

Rejection under 35 U.S.C. § 102(b)

On pages 2-4 of the Office Action, the Examiner rejected claims 1-3, 6-9, 11, 12, 15, and 25 under 35 U.S.C. § 102(b) as being anticipated by Lincklaen-Arriens et al.

On page 7 of the Office Action, the Examiner objected to claims 4 and 5 as being dependent on a rejected base claim but indicated their allowability if rewritten in independent form including all the limitations of the base claim. Applicant has amended present independent claim 1 to include the elements of the objected-to, and now-canceled, claim 4. Accordingly, claim 1 is in prima facie condition for allowance. Claims 2-3, 6-9, and 11 are also allowable in view of their dependency, directly or indirectly, from allowable claim 1.

Although different in scope, present independent claims 12 and 25 include recitations similar to allowable claim 1. Specifically, Applicant has amended claims 12 and 25 to include elements of objected-to claim 4. Accordingly, Applicant respectfully submits, the rejection of claims 12 and 25 under 35 U.S.C. § 102(b) is improper, and requests the Examiner to allow these claims.

Applicant respectfully traverses the rejection of claim 15 under 35 U.S.C. § 102(b) as being anticipated by Lincklaen-Arriens et al. based on the following remarks.

In order to properly anticipate Applicant's claimed invention under 35 U.S.C. § 102(b), the Examiner must show that each and every element of each of the claims in issue is found, either expressly described or under principles of inherency, in a single

prior art reference. Furthermore, “[t]he identical invention must be shown in as complete detail as is contained in the ... claim.” See M.P.E.P. §2131, page 2100-69, 8th Ed., August 2001, quoting *Richardson v. Suzuki Motor Co.*, 868 F.2d 1126, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). Further, “the elements must be arranged as required by the claim.” M.P.E.P. §2131, p. 2100-69.

Independent claim 15 recites an anode arrangement comprising “cathodic protection anode arranged for mounting on a metallic structure, an impedance element having one terminal connected to the anode and another terminal arranged for connection to said metallic structure, and an electronics module connected across the impedance element for at least one of transmitting and receiving signals.”

In contrast to claim 15, Lincklaen-Arriens et al. discloses a system for measuring the cathodic protection level at a remote point and converting the measurement to an acoustic signal that is transmitted to an observation point. Id. at col. 2, lines 49-52. More specifically, Figure 1 of Lincklaen-Arriens et al. discloses an anode 3; however, Lincklaen-Arriens et al. does not disclose an anode arrangement as claimed. In fact, the anode 3 of Lincklaen-Arriens et al. is used in a conventional way and there are no other components associated with this anode 3 in contrast with the arrangement of elements which are recited in claim 15. For example, claim 15 recites “an impedance element having one terminal connected to the anode and another terminal arranged for connection to said metallic structure, and an electronics module connected across the impedance element for at least one of transmitting and receiving signals.” Lincklaen-Arriens et al. fails to disclose at least these quoted elements.

However, in the Office Action, the Examiner alleges that Lincklaen-Arriens et al. discloses "... an impedance element (fig. 3(27)) having one terminal connected to the anode and another terminal arranged for connection to said metallic structure (fig. 3), and an electronics module (fig. 3(28)) connected across the impedance means for at least one of transmitting and receiving signals (fig. 3)." Office Action at page 4. Further, in the "Response to Arguments" section of the Office Action, the Examiner alleges "Lincklaen-Arriens et al. shows that the oscillatory circuit (27) is a variable capacitor, which is an impedance element. Also, the crystal (28), which is connected across the impedance element as seen in fig. 3, is responsible for transferring the vibrating signal to the metallic structure (column 6, lines 1-2)." Office Action at page 8.

Applicant respectfully disagrees with the Examiner's allegations because the Examiner has mischaracterized the teachings of Lincklaen-Arriens et al. Specifically, contrary to the Examiner's allegations, the variable capacitor does not have a terminal which is connected to the anode 3. The element 27 in Lincklaen-Arriens et al. is part of an oscillatory circuit 6 as shown in figure 1 and is only connected within that circuit. Therefore, Lincklaen-Arriens et al. does not disclose at least an impedance element having one terminal connected to the anode, as claimed. It amounts to a strained reading of the reference to follow the a path either through the complex circuitry of the oscillator and the steel of the pipeline or through the crystal and the steel of the pipeline to allege that this amounts to a terminal of that capacitor 27 being connected to the anode 3, as the Examiner did.

Furthermore, Lincklaen-Arriens et al. does not disclose at least "an impedance element having ... another terminal arranged for connection to said metallic structure,"

as recited in claim 15. In contrast to claim 15, the variable capacitor 27 of Lincklaen-Arriens et al. is a standard component positioned in a conventional electronic circuit and has conventional terminals, presumably just wires soldered to other wires.

Moreover, the Examiner attempts to analogize the crystal 28 of Lincklaen-Arriens et al. to the claimed “an electronics module connected across the impedance element for at least one of transmitting and receiving signals.” The crystal 28 is neither an electronics module nor is it arranged to for transmitting or receiving signals. Rather, crystal 28 is merely a transducer, as clearly depicted in figure 1 of Lincklaen-Arriens et al., which is used to apply vibrations to the pipeline. Alternatively, if the Examiner attempts to consider the combination of the whole oscillator circuit 6 and the crystal 28 as the claimed electronics module, then this fails as well, since the electronics module is not across any impedance element, as recited in claim 15.

Therefore, Lincklaen-Arriens et al. fails to disclose each and every element of claim 15. Accordingly, Applicant respectfully submits that the rejection of claim 15 under 35 U.S.C. § 102(b) is improper, and respectfully requests the Examiner withdraw the rejection and allow claim 15.

On pages 4-5 of the Office Action, the Examiner rejected claims 1, 12, and 25 under 35 U.S.C. § 102(b) as being anticipated by RU-C1-2006953. For at least the reasons mentioned above regarding claim 1, the claim is in prima facie condition for allowance. Further, claims 12 and 25, while of different scope, contain recitations similar to allowable claim 1. Accordingly, Applicant deems claims 12 and 25 are also allowable for at least the reasons mentioned regarding claim 1.

Rejection under 35 U.S.C. § 103(a)

On pages 5-7 of the Office Action, the Examiner rejected claim 10 as being unpatentable over Lincklaen-Arriens et al. in view of Brown et al. Claim 10 depends from independent claim 1. As discussed above regarding claim 1, the claim is in prima facie condition for allowance. Without acceding to the Examiner's allegations and conclusions regarding claim 10, Applicant respectfully submits that claim 10 is allowable at least in view of its dependency from allowable claim 1.

New claims 26-37

On page 7 of the Office Action, the Examiner objected to claim 5 as being dependent on a rejected base claim but indicated their allowability if rewritten in independent form including all the limitations of the base claim. Applicant has rewritten objected-to claim 5 as new claim 26, which includes all of the elements of original claim 1. Accordingly, claim 26 is in prima facie condition for allowance. Claims 27-25 are also allowable in view of their dependency, directly or indirectly, from allowable claim 26.

Although different in scope, new claims 36 and 37 include recitations similar to allowable claim 35. Accordingly, Applicant respectfully submits that claims 36 and 37 are neither anticipated by nor rendered obvious over the cited references. Applicant requests the Examiner to allow claim 36 and 37.

Conclusion

In view of the foregoing remarks, Applicant respectfully requests reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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